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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,257	03/27/2001	Yoshinori Yaginuma	826.1717	8015

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EXAMINER

KHATRI, ANIL

ART UNIT PAPER NUMBER

2124

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/817,257	<b>Applicant(s)</b> YAGINUMA, YOSHINORI	
	<b>Examiner</b> Anil Khatri	<b>Art Unit</b> 2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/10/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 and 19 are rejected under 35 U.S.C. 101 because they disclose a claimed invention that is an abstract idea as defined in the case *In re Warmerdam* 33, F.3d 1354, 31 USPQ2d 1754 (Fed. Cir 1994).

*Analysis:* In claims 1-19 the invention is found to be in the technological art since the invention is to be practiced by using a computer. Each of the claims is disclosed by the applicant as being apparatus claim. Since the claims are each a series of steps to be performed on a computer the process must be analyzed to determine whether they are statutory under 35 U.S.C. 101.

Examiner believes that the claims (1-19) are nonstatutory because they are simply a mathematical construct and involve no more than manipulation of an abstract idea and no involvement of using a computer and capable of producing a useful result in a tangible medium so its functionality can be realized. Therefore, applicant presents no substance upon which the claimed invention acts on this basis, thus claims 1-19 are nonstatutory and rejected under 35 U.S.C. 101.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 2124

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Tsukimoto* USPN 6,353,816

Regarding claims 1, 2, 6-10, 12, 13, 19 and 20

*Tsukimoto* teaches,

- a prediction unit predicting result value corresponding one more attribute values of unknown data using known data indicating correspondence between one or more attribute values and corresponding result values (see figures 1-3, column 2, lines 35-53, "a neural network.. after approximation");
- an analysis unit outputting analysis information indicating how at least one attribute of value the unknown data be amended to a change result value predicted by prediction unit into a desired prediction value (figures 4-6, "column 2, lines 54-62, "the units of a ... Boolean functions").

Art Unit: 2124

Regarding claims 3 and 15

*Tsukimoto* teaches,

- analysis unit extracts known data similar the unknown data from the known data with an importance factor of each attribute taken into account (figures 3-6, column 13, lines 29-55, “judgment after ... to the flowchart”).

Regarding claims 4 and 16

*Tsukimoto* teaches,

- analysis unit uses an influences factor on a result value from each attribute obtained by memory based reasoning as the importance factor (column 14, lines 52-65, “non importance processing... in this case”).

Regarding claims 5 and 17

*Tsukimoto* teaches,

- analysis unit uses a weight obtained from learning of a structured neural network as the importance factor (column 16, lines 58-67, “ a function that ... relationship obtains”).

Regarding claim 11

*Tsukimoto* teaches,

- analysis unit also outputs a certainty factor in the specified path (see figures 11).

Regarding claim 14

*Tsukimoto* teaches,

- attribute to be changes can be set by a user in an interactive mode (column 8, lines 30-44).

Art Unit: 2124

Regarding claim 18

*Tsukimoto* teaches,

- analysis unit sets a search range of an attribute value of an attribute set to be changed and obtains the analysis information by changing an attribute value of the attribute set to be changed in a corresponding search range (figures 4-6).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil Khatri, Primary Examiner whose telephone number is 571-272-3725. The examiner can normally be reached on M-F 8:30-5:00 PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-3725.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANIL KHATRI  
PRIMARY EXAMINER